A METHOD AND APPARATUS FOR ADAPTIVE ENCODING FRAMED DATA SEQUENCES

Abstract of the Disclosure

Methods and apparatus for adaptive encoding of at least a part of a current frame of a sequence of frames of framed data are described which operate on a block-by-block coding basis. The methods and apparatus divide at least a part of the current frame into blocks and then perform a first sub-encoding step on a block. Thereafter a second sub-encoding step is performed on the first sub-encoded block whereby the second sub-encoding step is optimized by adapting its encoding parameters based on a quantity of the first sub-encoded part of the current frame. The quantity is determined by prediction from a reference frame. Then the same steps are performed on another block of the part of the current frame. Typically, the framed data will be video frames for transmission over a transmission channel. The adaptation of the parameters for the second sub-encoding step may be made dependent upon the characteristics or limitations, e.g. bandwidth limitation, of the channel. In addition, the current frame may be discarded based on the predicted quantity and/or based on fullness of a buffer.